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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,650	10/08/2003	Raymond G. Kairawicz	7334-0002	7260

7590 04/19/2006

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EXAMINER

MARTIN, ANGELA J

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/681,650

Applicant(s)

KAIRAWICZ ET AL.

Examiner

Angela J. Martin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/3/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 21-27 and 37 is/are pending in the application.
- 4a) Of the above claim(s) 21-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 10-36 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species (claims 21-27) and method (claims 10-20 and 28-36), there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 3, 2006. Applicant canceled claims 10-20 and 28-36; and withdrew claims 21-27.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6 and 37 rejected under 35 U.S.C. 102(b) as being anticipated by Goodman, U.S. Pat. No. 4,553,419.

Rejection of claims 1-6 and 37 drawn to a battery can.

Goodman teaches a battery can comprising an elongated and substantially cylindrical shell (abstract), the shell having a wall with a smooth outer surface, the wall having an inner surface (col. 4, lines 2-7); and a plurality of grooves formed on inner surface of wall (abstract), the lands and grooves defining a uniform and continuously repeating pattern on the inner surface (Fig. 2). It teaches lands and grooves extend longitudinally and for substantially an entire axial length of the battery can (Fig. 4). It teaches the pattern on the inner wall is a sinusoidal pattern in cross-section (Fig. 4). It

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teaches pattern is a v-shaped pattern in cross-section (Fig. 2). It teaches the grooves extend the wall by about 25% of a cross-sectional thickness of the wall (col. 3, lines 62-68 and col. 4, lines 1-5). It teaches no portion of axial length of shell is below about 0.004 inches in cross-sectional thickness (3.5 mils=0.0035 inches; col. 3, lines 66-68).

Thus, the claims are anticipated.

4. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Iwase et al., U.S. Pat. No. 6,007,036.

Iwase et al., teach a battery can comprising an elongated and substantially cylindrical shell (col. 2, lines 23-24), the shell having a wall with a smooth outer surface, the wall having an inner surface (Fig. 1); and a plurality of grooves formed on inner surface of wall (col. 2, lines 23-26), the lands and grooves defining a uniform and continuously repeating pattern on the inner surface (Fig. 1 and 2). It teaches lands and grooves extend longitudinally and for substantially an entire axial length of the battery can (Fig. 2). It teaches the pattern on the inner wall is a sinusoidal pattern in cross-section (col. 6, lines 45-50). It teaches pattern is a v-shaped pattern in cross-section (col. 6, lines 45-50). It teaches the grooves extend the wall by about 25% of a cross-sectional thickness of the wall (col. 3, lines 52-54; Table 1-3).

Thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwase et al., U.S. Pat. No. 6,007,036.

Iwase et al., teach a battery can as described above. It teaches a minimum radii of the lands of the sinusoidal pattern is approximately equal to 0.005 inches (col. 2, lines 23-31).

Thus the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because although it does not teach the approximate number of grooves in the defined inner surface, for a AA-sized battery, which has a standard size, and having a minimum radii of the lands of the pattern, the number of grooves would have to be within the range of approximately 100 to 150.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kaplan et al., U.S. Pat. No. 6,399,243 B1, teach a battery can comprising a plurality of groove.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela J. Martin whose telephone number is 571-272-

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1288. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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